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ABSTRACT

This report is a formative evaluation of the use of an online listserv discussion group as part of a continuing project with schools exploring or implementing interdisciplinary teamed instruction (ITI). A survey was developed to identify member characteristics, what services were liked and used most, and what services were desired. Analysis of 59 completed surveys (out of 250 listserv subscribers) indicated respondents included educators in 29 states and 3 foreign countries with the majority (56 percent) being teachers. On a general level, the results supported the inclusion of cyberspace in the concept of professional community. Most respondents were local education agency staff who reported they were satisfied with the listserv services and used it frequently. Respondents also indicated strong interest in online education in ITI and the practical aspects of curriculum integration. The survey is appended. (JLS)

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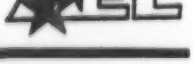

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INTRODUCTION

Professional development of educators in the 1990s is undergoing a major change from prior decades. In the 1950s, 1960s, 1970s, and into the 1980s, professional development in the education field was a very "top-down," bureaucratic endeavor with somebody at the top deciding what the principals, teachers, and others in the school system lacked and then hiring an "expert" to fill that gap in knowledge -- typically in one or two "in-service days." Even the term "in-service" connoted mandatory attendance in a session or series of sessions led by an outside "expert" hired by the highest school district administrators. These experts -- typically university professors with pet theories or projects -- usually delivered their messages/instruction at large gatherings of educators. Most often, these in-service sessions were one-shot, awareness-level presentations with no provisions for follow-up or follow-through with the local school principals or teachers.

If we define professional development of educators to be purposeful efforts to improve educators' knowledge, attitudes, and skills related to achieving agreed upon district or school goals, then, truly, there has been a major movement away from the old "in-service" model for professional development to a contemporary model of personal choice for professional growth. In the contemporary model of professional development, individual principals or teachers choose areas to improve in their job based on their self-evaluations. Then, these individuals seek various means and/or mechanisms to address those needs, whether through formal university courses, special teacher workshops or institutes, or self-initiated study.

Professional development of educators in the 1990s can be characterized by its relevance to the job. That is, rather than theory-based presentations that may or may not be applicable to the job of the supervisor, principal, or teachers, the trend nowadays is that it must be connected to the work of the educators. Another important feature of present professional development is that "craft knowledge" or knowledge derived from the practice of working on the job is valued much more so than in the past. The experiences of being the principal or teacher every day on the job counts, and new knowledge is acquired on the job. Too, the perceived needs for professional development change over time as experience and knowledge are acquired. Thus, contemporary professional development for educators values the knowledge and experience acquired daily and melds them into a program of increased inquiry and steady improvement that should be reflected in increased school and student performance.

Four major models of professional development have emerged in the 1990s that reflect the features named above. The four major models of contemporary professional development are (1) action research groups, (2) peer assistance groups, (3) master or lead teacher, and (4) professional networks. The latter model is the subject of this exploratory study. Although such networks can include visits to others in their work setting to share ideas, experiences, and new skills, this study deals solely with electronic networking of educators. The view here is that electronic networking of educators with a similar focus can become a viable community of learners who share successful practices, provide needed support, and engage in reflective dialogue. This study is about the

Interdisciplinary Teamed Instruction (ITI) listserv discussion group established by the Appalachia Educational Laboratory (AEL).

Interdisciplinary Teamed Instruction

The ITI project (1992-1994) was a two-year research and development project aimed at determining the effects of interdisciplinary teamed instruction on teaching and learning. The study also sought to validate the effectiveness of a professional development model that would facilitate development, implementation, and evaluation of ITI. Through summer institutes and on-site workshops, project staff provided training, resources, and ongoing technical assistance to teams of teachers and administrators from four rural Virginia secondary schools. These teams designed and tested integrated curricula that incorporated learning activities and alternative forms of assessment; engaged in collaborative action research to determine the effectiveness of units; and redesigned units using data-based feedback from students, teachers, parents, and supervisors.

Program participants reported positive effects of ITI on teaching at the four sites, particularly in terms of professional growth, reflective practice, and collegial interaction. They also reported positive effects of ITI on student attitudes and performance, particularly for lower-achieving students; rated the project's professional development model as highly effective; and described conditions that enhanced successful ITI implementation.

Participants made two recommendations based on these conditions. (1) Before ITI is implemented, school faculty and community should (a) learn about ITI concepts, processes, and conditions; and (b) determine their readiness and desire to begin ITI. (2) AEL should develop resources to support ITI implementation.

In response to these recommendations, Rebecca Burns, the ITI project director, wrote *Dissolving the Boundaries: Planning for Curriculum Integration in Middle and Secondary Schools*. This book, with *Facilitator's Guide,* is a professional development tool designed to increase a faculty's understanding of curriculum integration and to assist them with decision-making about ITI implementation. Since the spring of 1995, AEL staff have conducted 18 *Dissolving the Boundaries* professional development sessions in five states. Additionally, the book is used by schools, districts, and colleges in 36 states.

To assist schools that are ready to implement ITI, five summer institutes were held between June 1995 and August 1996 to prepare teams of teachers and administrators from 24 schools, representing five states, to design and implement ITI.

The ITI Listserv

To provide continuing support to schools that are exploring or implementing ITI, AEL initiated a professional electronic network, *iti@ael.org*, in July 1995. To promote membership in the listserv, co-moderator Douglas Fleming announced it on a number of other electronic networks to which he subscribes. Rebecca Burns, listserv owner/moderator, designed a written announcement with a description of the listserv's purpose and subscribing directions that she, Fleming, and other AEL staff distributed at conferences and workshops. A copy of this announcement is also included in the front pocket of *the Dissolving the Boundaries* notebook.

The ITI listserv is a moderated, electronic forum for sharing questions, insights, experiences, and resources related to ITI. Anyone with Internet access may subscribe to the list free of charge. Co-moderators Burns and Fleming keep discussions focused on ITI by providing stimulating messages, thought-provoking questions, descriptions of resources, and suggestions that assist participants with questions and issues related to ITI. The ITI listserv is an active forum that may exchange 20 or more messages in a 24-hour period. Conversation strands tend to have depth, with multiple subscribers replying to a query, request, or explanation.

Objectives of This Study

The general purpose of the ITI Listserv Electronic Survey was to identify the nature of the members in the group, learn what services were liked and used most, and discover what services should be planned. Specifically, the five objectives of this study were:

1. to identify the names, mailing addresses, and professional roles of members of the ITI listserv,

2. to discover how the ITI listserv members found out about the group and how often they check into it,

3. to learn what kind of ITI listserv messages are most/least helpful and what other activities should be explored,

4. to discover if there is any interest in a focused class/seminar on ITI, what level it should be, and what topics should be explored; and

5. to learn how the ITI listserv has been used by participants in their jobs.

Audience for This Report

The primary audience for this report of the ITI listserv survey is the staff of the AEL Scaling Up R & D Project. This report is seen as a formative evaluation of a new activity in the scaling-up project. As such, it is expected to be useful for providing staff with new information for decision-making regarding the ITI listserv activity. Secondary audiences would include survey researchers interested in the methodology employed in this study and others interested in electronic networking of professional educators.

METHODOLOGY

This section presents the ITI listserv population and sample the electronic survey used to collect the data, the procedures used in completing the study, and the data analysis procedures.

ITI Listserv Population and Study Sample

The population for this study included all those persons who were subscribers to the ITI listserv *(iti@ael.org)* on the date the electronic survey was posted. Inspection of the electronic records indicates that there were 250 subscribers to the ITI listserv on February 28, 1996, the month before the survey was posted for the first time. Educators can subscribe and unsubscribe to the listserv at any time, day or night. Since the listserv recordkeeping is by month, there is no way of knowing exactly how many subscribers there were on March 25, 1996, the day the ITI survey was posted.

The sample for this study included all those persons who completed and returned the ITI Listserv Electronic Survey by the closing date. Since one objective of this study (#1) was learning exactly who members of the group were and their professional roles, much of the descriptive information is presented in the Findings section. The sample of the ITI survey respondents included educators in 29 states and 3 foreign countries and the majority (56%) were teachers.

Electronic Survey

The ITI Listserv Electronic Survey was developed by AEL staff members Rebecca Burns and Merrill Meehan with the assistance of consultant Douglas Fleming. Fleming, a consultant to the ITI project, has helped deliver the ITI summer training institutes for three years and has assisted with the ITI listserv development. Based on an initial discussion with Burns, Meehan developed a rough draft of the electronic survey. Burns refined this first draft and forwarded it to Fleming for reviewing. His reactions/suggestions were sent to Meehan, who developed the second draft of the survey. Both Burns and Fleming reviewed the second draft, made suggestions for improvement, and provided them to Meehan. A third draft was prepared, reviewed, and refined into the fourth and final version of the ITI Listserv Electronic Survey. This survey development process began in the last week of January 1996 and was completed in the third week of March 1996.

The ITI Listserv Electronic Survey was designed purposefully to be short and easy to complete, as this was an exploratory study and the first study of the ITI listserv group. The final form of the electronic survey consisted of eight numbered questions, although two questions (#5 and #7) included subparts, yielding 11 actual questions. Most of the 11 questions solicited type-in, constructed responses. The three exceptions were questions #4 (which solicited a number), #7 (which solicited a yes or no response), and #7a (which solicited a check of one of four responses

provided). Survey questions were related to each objective in the study. More specifically, questions #1 and #2 addressed objective number 1; questions #3 and #4 addressed objective number 2; questions #5 and #6 addressed objective number 3; questions #7, #7a, and #7b addressed objective number 4; and question #8 addressed objective number 5.

Appendix A is a paper version of the ITI Listserv Electronic Survey before it was posted to the ITI listserv group. In its electronic format, the survey was designed to increase the response rate.

Procedures

The administration of the ITI Listserv Electronic Survey was completed in the three-week period from March 25 through April 15, 1996. The administration of the survey was completed totally via electronic means. The U.S. Postal Service, commercial letter and package carriers, and telephone lines (e.g., phone calls or faxes) were not used in this study. The survey was posted to the ITI listserv group and members responded with the reply feature on their computers.

The ITI survey was posted first on March 25; there were no prenotification messages. This first posting included a short set of instructions that briefly explained the purpose of the survey, the E-mail address of the ITI listserv moderator, directions for using the reply feature for returning the survey, and a thank you to survey completers. Directly under these instructions were the eight numbered survey questions, including the subparts to questions #5 and #7. After the last question, another thank you and directions for returning the survey to the listserv moderator at her E-mail address were provided. The screen concluded with Burns' mailing address, phone number, and fax number; however, as noted above, no surveys were returned using those means as this was solely an electronic survey.

The day after the ITI survey was posted for the first time, Burns posted a three-paragraph note to the full listserv group. In the first paragraph she thanked those who already completed and returned their survey electronically to her. She noted that 23 surveys were returned in the first 24 hours since the initial posting. In the second paragraph, Burns again requested non-completers to return their surveys. She provided several examples of how the responses would be used to serve the group better. Also, in this paragraph, she provided some of the suggestions for discussion group improvements in the completed surveys. The third paragraph said that she would analyze and summarize the surveys and report back to the full group as soon as possible.

On April 1, one week after the initial posting of the ITI survey, Burns posted another three-paragraph reminder message to the full listserv group. She noted in the first paragraph that 43 electronic surveys had been completed and returned as of that date. She again stated how important it was to receive more surveys for her funding source to "know what we are doing, how well we are doing, and who we are serving" (R. Burns, unpublished E-mail message, April 1996). The second paragraph acknowledged that some members of the ITI group were on spring break, but Burns requested that non-completers return the survey when they returned. Too, she gently chided some

frequent ITI discussants who had not returned their surveys. The third paragraph included a thank you to all for the active participation in the ITI listserv.

The fourth and final posting regarding the ITI electronic survey was on April 11. Essentially, this posting was a repeat of the full ITI Listserv Electronic Survey initially posted on March 25. Burns included a final plea for returned surveys from non-completers just before the instructions section. Also, she addressed this last posting to new members of the listserv group who subscribed after the previous messages and the first survey. This last posting indicated that data entry would be starting.

The ITI electronic surveys were collected up to April 15. By that date, there were 59 completed and returned surveys out of the estimated population of 250 members in the Listserv. Thus, the return rate was 23.6% of the population at the start of the survey. The 59 completed ITI surveys were assembled for the next stage of data analysis, which is described in the following subsection.

Data Analyses

The analyses of the data from the 59 completed ITI electronic surveys were completed by the co-authors at AEL in Charleston, West Virginia.

Analysis of the data from the 11 survey questions (counting subparts to two numbered questions) was rather straightforward. Two databases were created for the survey data, one for data to be analyzed statistically and one for information from the constructed-response questions to be analyzed by categorization procedures. Relative to the statistical database, first the completed surveys were inspected visually to devise the different position roles or job names (question #2), the different categories of responses to asking how the respondent found out about the ITI listserv (question #3), and how many times members check in per week (question #4). Next, an SPSS file was created and the raw data from questions #2, #3, #4, #7, and #7a were entered and saved. Regarding the constructed-response database, the respondents' typed-in replies to questions #1, #5 (two subparts), #6, #7b, and #8 were entered into a WordPerfect file by question number.

Actual data analyses tasks were split between the co-authors, with cross-checks provided by the other co-author. Meehan analyzed the statistical database using SPSS-PC+ software. Here, simple frequencies and bar charts were completed for questions #2, #3, #4, #7, and #7a. When completed, the co-authors met and discussed the SPSS-PC+ printout in terms of the findings and what they mean for the conclusions and recommendations of the study. Burns analyzed the WordPerfect file of typed-in responses to learn the locations of ITI listserv members in question #1 and then to construct categories of responses supplied to questions #5, #6, #7b, and #8. When these categories were developed, the co-authors met to review them and agree to their logical bases, then to discuss these findings and their input to the conclusions and recommendations. It should be noted

that some typed-in responses were longer than others, but the coding was completed on the basis of the dominant theme expressed in the response.

Findings from these data analyses are presented in the next section.

FINDINGS

This section presents the findings from the administration of the ITI Listserv Electronic Survey in March/April 1996. These findings are organized by the five objectives of the survey, in order.

Location and Roles of ITI Listserv Members

Question #1, soliciting members' names and mailing addresses, revealed that the 59 survey respondents lived in 29 states and 3 foreign countries (Brazil, Israel, and Canada). All major regions of the United States were represented by the ITI listserv members.

Question #2 solicited the name of the respondent's professional role or job. Inspection of the typed-in responses led to 13 different categories with at least one response, including a category for "Other." The high school teacher category had the most responses with 16 (27.1%). The second largest category of professional role or job was teacher-- unknown level with 9 (15.3%) responses. The third largest category was middle school level teacher with 7 (11.9%) responses, while the fourth was higher education with 6 (10.2%) responses. The remaining eight categories had four or less responses. Those categories were central office staff (4, 6.8%); other (4, 6.8%); high school principal (3, 5.1%); state department of education (3, 5.1%); middle school level principal (2, 3.4%); other Regional Educational Laboratory (2, 3.4%); principal at unknown level (2, 3.4%); and elementary level teacher (1, 1.7%).

Combining similar professional role responses produces interesting results. For example, combining all the teacher responses (elementary, middle school, high school, and unknown level) yields a total of 33 or 55.9% of the ITI survey respondents. Combining all the principal responses (middle school, high school, and unknown) yields a total of 7 or 11.9% of the survey respondents. Then, adding in the central office staff responses (N = 4) to those of teachers (N = 33) and principals (N = 7) produces a total of 44 or 74.6% of the ITI electronic survey respondents who had roles or jobs at the local education agency (LEA) level. The higher education role responses, at 6 for 10.2%, was the next largest employer group.

Discovery and Activityness of ITI Listserv

Question #3 was: "Please tell us how you found out about *iti@ael.org*." Fifty-five of the 59 respondents answered this question. Inspection of the typed-in replies led to the development of eight different categories. Of the valid responses, 27 or 49.1% replied that they found out about the ITI listserv from another listserv. The second highest category was through the Internet with 12 (21.8%) responses. The third highest category was discovery through a colleague with 8 (14.5%)

responses. The four remaining categories, in descending order, were Doug Fleming (3, 5.5%), an ITI event (2, 3.6%), a non-ITI conference (1, 1.8%), and another user (1, 1.8%).

Interestingly, it was ITI consultant Doug Fleming who put the ITI listserv information up to the other listservs, so, combining the "another listserv" category (N = 27) with the "Doug Fleming" category (N = 3) produces 30 of the 55 valid responses, or 54.5%, directly attributal to Fleming.

Question #4 asked: "On average, how many times per week do you check into *iti@ael.org*?" Fifty-five of the 59 respondents provided a number for this question. Inspection of the responses led to placing them into five categories of 1-5 times, 6-10 times, 11-15 times, 16-20 times, and more than 21 times per week. The largest category of replies was 1-5 times per week with 27 responses, or 49.1% of the valid replies. The second largest category was 6-10 times per week with 18 (32.7%). Third highest was more than 21 times per week with 4 (7.3%), followed by 11-15 times per week with 3 (5.5%), and last was 16-20 times with 2 (3.6%).

Thus, regarding how active the ITI listserv members reported being with the electronic community of learners, almost half said they checked in between 1 and 5 times per week and another third of the group said they checked in between 6 and 10 times per week. Too, another 7.3% said they were active with the ITI listserv more than 21 times per week, on average.

Most/Least Helpful Messages and Activities Wanted

Question #5 on the ITI survey contained two parts, both constructed-response type. The first part asked, "What kinds of message on our listserv do you find most helpful to you?" The second part asked, "Which are least helpful to you?" Responses to each part of the fifth question are presented next.

In terms of the typed-in responses to the most helpful messages, the survey completers provided 56 codable responses. Inspection of the replies from the respondents revealed that they all fit into one large category. Survey respondents indicated overwhelmingly that listserv messages related to integrated curriculum and instructional practices -- particularly those that provided descriptions of actual work being done by teachers -- were the most helpful. One respondent summed up the "most helpful messages" well: "I enjoy both the theoretical and practical discussion and find both useful in different ways -- the theoretical to make me think and the practical to actually put into use in the classroom."

Regarding the second part of the fifth question, survey respondents offered few replies about what listserv messages were least helpful. In fact, only 42 responses were typed in. Most of these responses were positive in nature, such as, "[I] liked them all," or "[I] got something from most messages." However, some survey completers indicated that "long posts," those "unrelated to integration," or "personal notes and chit chat" were least well received.

Questions #6 was: "What other type(s) of activities or approaches would you like us to try out?" ITI survey completers provided 42 coded responses to this question. Inspection of these responses led to four categories. The majority (20, 47.6%) of the coded segments of other listserv activities/approaches dealt with immediate application or transfer to the classroom. As examples, replies included: "more sharing of plans to use in the classroom," "compile a database of tried and true teaching ideas that others could access," and "online seminar or course with examples of integrated curriculum." One interesting suggestion was: "How about being able to post curriculum in process for feedback from the list[serv]?" Another category of responses (6, 14.3%) dealt with suggestions for listserv organization. Examples in this category included archiving messages to a Web site and subdividing the group into different "chat groups" (e.g, those interested in ITI at the high school level).

A third category (5, 11.9%) included suggestions for summaries and/or reviews. Examples in this category included book reviews or reports that "summarize practice, policy, and/or philosophy at many schools" or "research updates and literature reviews." The remaining responses (11, 26.2%) were statements of satisfaction with "things as they are." One respondent said, "I value all discussion on the listserv." Other comments included "It's nice to pick and choose from a variety of 'threads' that occur" and "I'm still getting used to this format for exchanging ideas."

Interest in a Focused ITI Class/Seminar

Question #7 consisted of three parts. The first part asked if the respondent was interested in "a small class/group/or seminar on ITI to be conducted on a dedicated listserv." Fifty-two of the 59 respondents answered this question, with 42 (80.8%) checking the Yes response and 10 (19.2%) checking the No response.

The second part of the question (#7a) was: "If yes to #7, what level for the class most interests you? (check one)." The four options to check were "Continuing education/professional development," "Graduate credit level," "Personal audit," and "Other (describe _____)." Thirty-four of the 59 respondents (eight less than checked Yes to #7) checked one of the four options. The largest category of responses was "Personal audit" with 15 (44.1%) checks. The second largest category of "Continuing education/professional development" was very close to the largest category with 14 (41.2%). The third largest category was "Graduate credit level" with 4 (11.8%) responses, while the fourth category was "Other" with just 1 (2.9%) response.

Thus, of those respondents who checked what level they would prefer for an ITI class/seminar on a dedicated listserv, they were about equally split between continuing education or personal audit with much less interest in graduate level credit.

The third part of this question (#7b) was: "If yes to #7, what areas/topics would you like to investigate? Please name them below." Thirty-nine responses were provided by the ITI electronic

survey respondents. All of the suggested topics for an on-line ITI class were related to the "how-to's" of curriculum integration. However, the responses fit into the two categories of general and specific. Some of general category responses (17, 43.6%) included "development of ITI units," "team building ups and downs," "models for instructional design," and "issues on planning courses on curriculum integration within teacher education programs." Other topics named (39, 56.4%) were a little more specific, but nevertheless related to the implementation of ITI. Examples of these more specific responses included "assessment tools for integrated projects," "social studies/English/arts integration at the high school," and "integration strategies for freshman."

On-the-Job Uses of ITI Listserv

Question #8 was the last and longest question on the ITI survey. This question was: "Please describe how you have used our listserv in your work. Provide any examples, incidents, contacts, resources located, or other examples of how our listserv was useful to you."

Fifty-five (93.2%) of the 59 survey completers replied to this eighth question. All 55 respondents described how they have used the ITI listserv in their work. These descriptions were divided into two main categories: (1) sharing or passing along messages to others and (2) personal development. In terms of the first category, 29 (52.7%) replies described how respondents shared ITI listserv messages with others such as students, parents, colleagues, or supervisors. For example, one teacher said she regularly tacks ITI message printouts on the faculty bulletin board in her school and a principal said, "I often share thought-probing exchanges with my teachers."

Regarding the second category of personal development, 26 (47.3%) responses were provided. Examples of replies in this category included "guide my thinking and provide me with invaluable resources," "increasing my awareness of innovative practices," and "ideas for personal research and essential questions to frame and develop my school's program."

Conclusions and recommendations drawn from these ITI survey findings are presented in the next section.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions and recommendations drawn from the ITI electronic survey are presented in this section. These conclusions and recommendations are not presented in any priority; rather, they are presented as they emerged from the data.

Conclusions

One conclusion drawn from this study of the ITI listserv group is that the concept of "community" should be expanded to include cyberspace. That is, community is not so much a physical "place" in which events must occur as it is the experience itself. This study of the ITI listserv showed that a community can exist in cyberspace. Given the responses to this ITI survey, we can think of this group as a cyber-community. This is evidenced by the fact that respondents from at least 29 states and 3 foreign countries participate in the ITI listserv.

Another conclusion from this electronic survey is that the ITI listserv is made up largely (75%) of local education agency staff and they like what they are getting now. The most helpful listserv messages related to integrated curriculum and instruction and most particularly those that included descriptions of actual work in this area being completed by teachers. Even when asked to name the least helpful messages, respondents used that space to say that most messages were helpful and only a very few replied with least helpful messages.

We conclude from this study that the ITI listserv group is very active. Data show 7% of survey respondents check into the listserv more than 21 times per week, one third check in between 6 and 10 times, and half do so between 1 and 5 times per week.

The contribution of consultant Doug Fleming to the ITI listserv has been very important to its success. First, we discovered that 55% of the survey respondents either learned about the AEL ITI listserv directly from Fleming or from other listservs to which he provided contact and subscription information. Second, Fleming's contributions to the moderation of the discussion were acknowledged by respondents. For example, one respondent wrote, "I especially like Doug's stimulating questions."

Next, we conclude from the data that there is interest in an online class regarding ITI, but not for graduate credits. Approximately 80% responded positively to the idea of an online class about ITI on a dedicated listserv. When asked at what level for that class they were interested, the two top categories checked were personal audit and professional development, accounting for 85% of all the responses. Also, we conclude from the data that all of the suggested topics for such an online class related to practical "how-to's" of curriculum integration.

If we can define a community of learners for educators as including the sharing of their values and beliefs about improving instruction for their students, engaging in reflective dialogue about teaching and learning, and discussing implications for their professional practices; then we conclude that the ITI listserv is helping to create a community of learners, according to survey responses.

Last, three conclusions related to the methodology were drawn from the ITI electronic survey. First, with the possibility of listserv clients subscribing and unsubscribing up to the minute the electronic survey is posted, defining the population becomes more difficult than with mail or telephone surveys. Second, if one were to hypothesize that an active, electronic community of professional educators would respond better than other groups to a survey (a rather simple one, at that), these ITI survey results would not support that hypothesis. With a return rate of 23.6%, the survey showed electronically connected participants to respond similary to many other groups in terms of their overall response rate. Third, however, electronic respondents (in this study, at least) provide *much quicker* replies. In this effort, 23 of the 59 completed surveys (39%) were returned *within the first 24 hours* of the first posting. This has implications for future electronic surveys.

Recommendations

One obvious recommendation from this study would be to continue operating the ITI listserv. Certainly, this cyberspace community is meeting the needs of a dedicated and active group of educators across the United States and several foreign countries. Closely related to this is the recommendation that the implementation of the AEL ITI listserv continue to focus on practical, classroom-oriented topics. With three-fourths of the group being employed at the local education agency level, it is very important to provide discussion topics that meet local educators' needs. Too, the very active nature of this listserv group shows that weekly contacts/stimulation by the moderator are required.

A second conclusion would be to continue to utilize the services of ITI consultant Doug Fleming. His contributions toward obtaining new ITI listserv subscribers, plus his contributions to the ongoing discussions regarding integrated curriculum and instruction, were made clear in this study.

There is enough interest in a separate online class on ITI that the moderator of this group should pursue it in the near future. We recommend a pilot test of a small class/seminar on ITI on a dedicated listserv that focuses on practical, how-to-do-its of curriculum and instruction integration. Also, the pilot ITI class/seminar should be geared to continuing education and personal audit-type needs and *not* toward providing graduate course credits.

Somewhat related to the prior recommendation is the call for the ITI discussion to *not* get so focused on practical, everyday issues as to lose sight of the fact that to maintain its position as a professional community of educators, the group also must discuss other issues or, at least, weave

these other types of issues into the discussions. Here, we are talking about the fact that the ITI listserv group must continue to discuss their values and beliefs about improving instruction for their students. Too, the group members should continue to engage in thoughtful, reflective dialogue regarding teaching/learning situations. Last, ITI group members should continue to be stimulated to discuss their own professional practices and how ITI topics have affected (or not affected) those practices. If the ITI listserv is able to stimulate discussions that include these types of important issues, then we can say that the group is an electronic community of learners. If discussion about these types of topics starts to fall off or, worst case scenario, is abandoned completely, the group probably will become less of a community of learners, according to our definition.

The last recommendation of this study relates to its methodology. From this study we learned that an electronically connected group of educators responds about the same to an electronic survey as do other groups when they respond to a mail or telephone survey. However, one major lesson learned in this study was that electronic respondents reply *much quicker* to the initial posting of the survey. Thus, the recommendations to other listserv surveyors is to put more effort into the upcoming electronic survey *before* its first posting. Based on this study, the implementation of more prenotifications (announcements, notices, teasers, etc.) should yield a larger number of immediate survey returns. A related recommendation would be to determine the actual number of listserv subscribers immediately before the first posting of the electronic survey in order to establish the correct number in the population.

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APPENDICES

Appendix A:

ITI Listserv Electronic Survey

ITI Listserve Electronic Survey

Instructions: To help us document **iti@ael.org** services for our funding source and also to help us know what services you would like us to plan, please complete this electronic survey as soon as possible and return to **burnsb@ael.org**. Make it easy on yourself! Use your reply feature. Thanks in advance.

1. What is your name and official mailing address? (Snail mail address)

2. What is the name of your professional role or job?

3. Please tell us how you found out about **iti@ael.org**.

4. On average, how many times per week do you check into **iti@ael.org**?

   _____times per week, on average.

5. What kind of messages on our Listserve do you find most helpful to you? Which are least helpful to you?

   Most =

   Least =

6. What other type(s) of activities or approaches would you like us to try out?

7. We are thinking of developing and conducting a small class/group/or seminar on ITI to be conducted on a dedicated Listserve. Do you have an interest in such an activity?

_____Yes _____No

a. If yes to #7, what level for the class most interests you? (check one)
   - _____ Continuing education/professional development
   - _____ Graduate credit level
   - _____ Personal audit
   - _____ Other (describe_____)

b. If yes to #7, what areas/topics would you like to investigate? Please name them below.

8. Please describe how you have used our Listserve in your work. Provide any examples, incidents, contacts, resources located, or other examples of how our Listserve was useful to you.

Thank you for completing this electronic questionnaire and returning it to **burnsb@ael.org**. Your interest in our service is appreciated.

Appendix B:

Completed Evaluation Standards Checklist

Citation Form

The Program Evaluation Standards (1994, Sage) guided the development of this (check one):

____ request for evaluation plan/design/proposal
____ evaluation plan/design/proposal
____ evaluation contract
__X__ evaluation report - formative
____ other: _____

To interpret the information provided on this form, the reader needs to refer to the full text of the standards as they appear in Joint Committee on Standards for Educational Evaluation, *The Program Evaluation Standards* (1994), Thousand Oaks, CA, Sage.

The *Standards* were consulted and used as indicated in the table below (check as appropriate):

Descriptor		The Standard was deemed applicable and to the extent feasible was taken into account.	The Standard was deemed applicable but could not be taken into account.	The Standard was not deemed applicable.	Exception was taken to the Standard.
U1	Stakeholder Identification	XXX			
U2	Evaluator Credibility	XXX			
U3	Information Scope and Selection	XXX			
U4	Values Identification	XXX			
U5	Report Clarity	XXX			
U6	Report Timeliness and Dissemination	XXX			
U7	Evaluation Impact	XXX			
F1	Practical Procedures	XXX			
F2	Political Viability			XXX	
F3	Cost Effectiveness	XXX			
P1	Service Orientation	XXX			
P2	Formal Agreements	XXX			
P3	Rights of Human Subjects	XXX			
P4	Human Interactions	XXX			
P5	Complete and Fair Assessment	XXX			
P6	Disclosure of Findings	XXX			
P7	Conflict of Interest	XXX			
P8	Fiscal Responsibility	XXX			
A1	Program Documentation	XXX			
A2	Context Analysis	XXX			
A3	Described Purposes and Procedures	XXX			
A4	Defensible Information Sources	XXX			
A5	Valid Information	XXX			
A6	Reliable Information	XXX			
A7	Systematic Information	XXX			
A8	Analysis of Quantitative Information	XXX			
A9	Analysis of Qualitative Information	XXX			
A10	Justified Conclusions	XXX			
A11	Impartial Reporting	XXX			
A12	Metaevaluation	XXX			

Name (typed) Rebecca C. Burns Date: July 30, 1996

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